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EXAMINER	
WU, DOROTHY	

ART UNIT	PAPER NUMBER
2615	9

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/581,078	Applicant(s) BIRK, UZI	
	Examiner Dorothy Wu	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-30 and 32-40* is/are rejected.

7)☒ Claim(s) *6 and 31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Applicant has not amended the claims that cite reference characters. The objection to the claims still stands. Correction is still required.

2. Acknowledgement is made of the amendments to the claims. The 35 USC 112, 2nd paragraph rejections of claim 19, 21, and 22 have been withdrawn.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 2, and 27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "by-pass of said control means to allow a user for either local or remote, automatic or manual, control of said controllable device." It is unclear whether local or remote, or automatic or manual, or some combination of local/remote and automatic/manual control would be allowed through by-pass of the control means.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 9, 10, 21, ~~22~~, 25-30, 35, ~~37~~, 38, and 40 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schwarz et al, U.S. Patent 3,718,120.

Regarding claim 1, Schwarz et al teaches an apparatus for monitoring at least a part of an animal related space (kennel) (col. 1, lines 2-7), comprising a controllable device (various motors throughout the system) and at least one image capturing device (television cameras **202**) for generating and supplying captured image data regarding said animal related space (col. 5, lines 1-16), characterised in that: said image capturing device (television camera **202**) connectible to a telecommunications network (common electrical bus system **200**) (col. 5, lines 2-5; Fig. 3); and a remote control device (control panel **32**) connectible to said telecommunications network (common electrical bus system **200**) (Fig. 2). The communication ports are inherently taught. Schwarz also teaches that said image capturing device (television camera **202**) is connectible to said remote control device (control panel **32**) via said telecommunications network (common electrical bus system **200**) (Fig. 2); said remote control device (control panel **32**) is adapted to receive said captured image data and is associated with a display unit (display section **214**) for allowing viewing of said captured image data (col. 5, lines 14-16); a data input means (selection keys **216**) is associated with said remote control device (control panel **32**), for entering a control instruction (col. 5, lines 16-19); said remote control device (control panel **32**) is adapted to

output said control instruction via said further communications port (col. 5, 19-24); said controllable device (various motors throughout the system) is arranged to be interactively manipulated by said remote control device (control panel **32**) in response to said control instruction (col. 5, lines 8-13, Fig. 2), wherein a control means (signal converter 210) is provided between said controllable device (various motors throughout the system) and said communications port, said controllable device (various motors throughout the system) being automatically controlled by said control means (signal converter 210) (col. 5, lines 8-13).

Regarding claim 2, Schwarz et al teaches an apparatus for monitoring at least a part of an animal related space (kennel) (col. 1, lines 2-7), comprising a controllable device (various motors throughout the system) and at least one image capturing device (television cameras **202**) for generating and supplying captured image data regarding said animal related space (col. 5, lines 1-16), characterized in that said image capturing device (television camera **202**) is connectible to a telecommunications network (common electrical bus system **200**), for association of said image capturing device (television camera **202**) with a remote control device (control panel **32**) connectible to said telecommunications network and adapted to receive said captured image data (col. 5, lines 2-6, 14-16). The communication ports are inherently taught. Schwarz further teaches control means (signal converter 210) is provided between said controllable device (various motors throughout the system) and said communications port, said controllable device (various motors throughout the system) being automatically controlled by said control means (signal converter 210) (col. 5, lines 8-13).

Regarding claim 3, Schwarz teaches that the controllable device (various motors throughout the system) is controlled by signal converter 210, and is thereby associated with a communications port (col. 5, lines 8-13; Fig. 2).

Regarding claim 9, Schwarz teaches that said animal related space (kennel) comprises an animal space provided with said controllable device (transport means 28) (col. 1, lines 2-8; col. 5, lines 42-48).

Regarding claim 10, Schwarz teaches that said animal related space comprises an animal gateway provided with a controllable device (screen 58) (col. 7, lines 5-7).

Regarding claim 21, Schwarz teaches that said remote control device (control panel 32) is provided with a display unit (display section 214) for allowing viewing of said captured image data, and wherein a data input means (selection keys 216) is associated with said remote control device (control panel 32), for entering a control instruction (col. 5, lines 14-19).

Regarding claim 25, Schwarz teaches that said display unit (display section 216) can display an image wherein said image is captured by an image capturing device (television 202) (col. 5, lines 14-16). As the cameras are used to monitor the kennel, the image may be that of an animal. See above.

Regarding claim 26, Schwarz teaches the apparatus of claim 1. See above. Schwarz teaches a remote control device (control panel 32) adapted to receive captured image data comprising a communications port (Fig. 2), via which said control instruction is to be output, for interactively manipulating a controllable device (transport means 28) of the apparatus (col. 5, lines 8-19, 42-48).

Regarding claims 27-30, 35, 38, and 40, because the apparatuses of claims 1, 3, 4, 5, 21, and 25 are taught, the methods corresponding to the apparatuses are also taught.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4, 5, 7, 22, 32, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz, U.S. Patent 3,718,120, in view of York, U.S. Patent 5,850,340.

Regarding claim 4, Schwarz teaches the apparatus of claim 1. See above. Schwarz teaches that said remote control device (control panel 32) is provided with a display unit (display section 214) for allowing viewing of said captured image data, and a data input means (selection keys 216) is associated with said remote control device (control panel 32), for entering a control instruction (col. 5, lines 14-19). Schwarz does not teach that said control means is provided with a display unit and data input means for locally entering a control instruction. York teaches a system in which control of a PC can toggle between local and remote control (col. 5, lines 31-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the practice of remote and local control taught by York in the apparatus of Schwarz to make an animal space monitoring system in which components of the system can be controlled both locally and remotely, wherein the local units comprise the same display and data input means as the remote units. One of ordinary skill would have been

motivated to make such a modification to enable an operator to control components of the monitoring system from multiple locations.

Regarding claim 5, Schwarz teaches that a control means (motor driven platform) is provided between said image capturing device (camera) and said communications port, said image capturing device (camera) being automatically controllable by said control means (col. 8, lines 21-29).

Regarding claim 7, York teaches a system in which control of a functional unit can toggle between local and remote control (col. 5, lines 31-33), which reads on a control means being switchable between a remote control mode for receiving said control instruction from said remote control device, said controllable device being adapted to perform an operation in response to said remote control device via said control means, and a local control mode from commands input from the local data input means.

Regarding claim 22, Schwarz teaches the apparatus of claim 1. See above. Schwarz teaches that said remote control device (control panel 32) is provided with a display unit (display section 214) for allowing viewing of said captured image data, and a data input means (selection keys 216) is associated with said remote control device (control panel 32), for entering a control instruction (col. 5, lines 14-19). Schwarz does not teach that said control means is provided with a display unit and data input means for locally entering a control instruction. York teaches a system in which control of a PC can toggle between local and remote control (col. 5, lines 31-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the practice of remote and local control taught by York in the apparatus of Schwarz to make an animal space monitoring system in which components of the

system can be controlled both locally and remotely, wherein the local units comprise the same display and data input means as the remote units. One of ordinary skill would have been motivated to make such a modification to enable an operator to control components of the monitoring system from multiple locations.

Regarding claims 32 and 37, because the apparatuses of claims 7 and 22 are taught, the methods corresponding to the apparatuses are also taught.

7. Claims 8, 12-16, 19-20, 33, 34, 36, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz et al, U.S. Patent 3,718,120, in view of Hansson, U.S. Patent 5,979,359.

Regarding claim 8, Schwarz teaches the apparatus of claim 4. See above. Schwarz does not teach that either of said remote control device and said control means is adapted to generate an alerting signal if an abnormal situation is established. Hansson teaches that an alarm signal can be generated if an injured animal is established (col. 15, lines 2-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Schwarz with the practice of generating an alarm in an abnormal situation taught by Hansson to make an apparatus that controls functions within an animal space from a centralized location and generates an alert in the presence of an abnormality. One of ordinary skill would have been motivated to make such a modification to alert an operator of situations that require action beyond the automated functions provided in the monitoring system.

Regarding claim 12, Schwarz teaches an apparatus according to claim 1. See above. Schwarz does not teach that said controllable device comprises a movable robot arm provided

with a gripper. Hansson does teach that said controllable device comprises a movable robot arm (robot arm 7) provided with a gripper (gripper 7a) (col. 9, lines 33-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the remote control, animal space monitoring system of Schwarz with the robot arm and gripper of Hansson to make an apparatus that enables an operator to remotely control the robot arm to milk a cow. One of ordinary skill would have been motivated to make such a modification to streamline the process of attaching teatcups to cows and thus speed the milking process.

Regarding claim 13, Hansson teaches that said image capturing device is arranged on said robot arm (col. 9, lines 59-61).

Regarding claim 14, Hansson teaches that a position of a teat of an animal is established by said image capturing device (video camera), for allowing attachment of a teatcup on said teat (col. 9, lines 48-53).

Regarding claim 15, Schwarz teaches the apparatus according to claim 1. See above. Schwarz teaches the remote execution of functions within an animal space. See above. Schwarz does not teach milking equipment provided with at least one teatcup associated with a pulsator, adapted to be controlled by said remote control device. Hansson does teach milking equipment with at least one teatcup (col. 9, lines 19; 48-54). As the apparatus is directed towards milking, the pulsator associated with the teatcup in inherently taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the practice of using a computerized control device to attach teatcups to a cow's teats taught by Hansson with the practice of remotely executing functions within an animal space taught by Schwarz to make an apparatus that remotely controls milking equipment with at least one

teatcup. One of ordinary skill would have been motivated to make such a modification to streamline the process of attaching teatcups to cows and thus speed the milking process.

Regarding claim 16, Hansson is directed towards milking equipment (col. 9, line 19). The association of a teatcup with a vacuum source via a valve is inherently taught.

Regarding claims 19 and 20, Schwarz teaches the apparatus of claim 1. See above. Schwarz does not teach that analysis of an image captured by said image capture device is performed by said control means. Hansson does teach that an image captured by an image capture device is subject to analysis (col. 9, lines 49-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the animal space monitoring system of Schwarz with the analysis of image data taught by Hansson to make an animal space monitoring system that analyzes image data and performs functions based upon the analysis. One of ordinary skill would have been motivated to make such a modification to accurately place the teatcups on the cow.

Regarding claims 33, 34, 36, and 39, because the apparatuses of claims 8, 19, and 20 are taught, the methods corresponding to the apparatuses are also taught.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz, U.S. Patent 3,718,120.

Regarding claim 11, Schwarz teaches that said controllable device comprises an openable and closeable gate (col. 7, lines 5-7). As the operator uses image data provided by the image capturing devices, it would have been obvious that the position of said gate would be established by said image capturing device.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz et al, U.S. Patent 3,718,120, in view of Montalescot et al, U.S. Patent 4,867,103.

Regarding claim 17, Schwarz teaches an apparatus according to claim 1. See above. Schwarz does not teach that said controllable device comprises a driving means with a turnable axle connectible to said image capturing device. Montalescot does teach that said controllable device comprises a driving means (support 112) with a turnable axle connectible to said image capturing device (camera 110) (col. 8, line 65– col. 9, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Schwarz with the use of a turnable driving device connectible to the camera taught by Montalescot to make an animal-space monitoring system that can remotely control turnable driving devices connectible to cameras. One of ordinary skill would have been motivated to make such a modification to more precisely align the teatcup with the teat before applying the teatcup to the animal.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz et al, U.S. Patent 3,718,120, in view of Hamada, U.S. Patent 6,107,937.

Regarding claim 18, Schwarz teaches an apparatus according to claim 1. See above. Schwarz does not teach that said controllable device comprises a driving means for a zoom lens arranged on said image capturing device. Hamade teaches that an operator may remotely control the zoom position of a camera (col. 3, lines 37-41). The driving means for a zoom lens is inherently taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Schwarz with the use of remotely

controllable zoom driving means taught by Hamada to make an animal-space monitoring system that can remotely control the zoom position of a camera. One of ordinary skill would have been motivated to make such a modification to control the level of detail the operator wishes to view in the displayed image.

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz et al, U.S. Patent 3,718,120, in view of Yarnall, Jr. et al, U.S. Patent 5,808,551.

As best understood from the language of the claim, regarding claim 23, Schwarz teaches the apparatus of claim 1. See above. Schwarz does not teach that the input device comprises a microphone and/or loudspeaker. Yarnall teaches that an input device for monitoring animals comprises a microphone (col. 8, lines 27-31, 45-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Schwarz with the use of a microphone to input an operator's voice taught by Yarnall to make an animal-space monitoring system that allows for the input of an operator's voice. One of ordinary skill would have been motivated to make such a modification to enable an operator to communicate to an animal using his voice.

12. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz et al, U.S. Patent 3,718,120, in view of Schulte et al, U.S. Patent 5,950,562.

Regarding claim 24, Schwarz teaches the apparatus of claim 1. See above. Schwarz does not teach that said animal related space comprises a microphone and/or loudspeaker. Schulte teaches the use of a loudspeaker to manage the animals, which reads on an animal space

comprising a loudspeaker (col. 7, lines 41-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Schwarz with the use of a loudspeaker taught by Schulte to make an animal-space monitoring system whose animal space comprises a loudspeaker. One of ordinary skill would have been motivated to make such a modification to remotely control loudspeakers that may entice animals to enter their stalls.

Allowable Subject Matter

13. Claims 6 and 31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

As best understood from the language of the claim, the prior art does not teach an apparatus with the limitations of claims 1 and 4, further comprising a switch means provided for allowing by-pass of said control means to allow a user for either local or remote control of said controllable device.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Wu whose telephone number is 703-305-8412. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DW
May 17, 2004

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